



KARNATAKA TEST HOUSE PVT. LTD.

MATERIAL TESTING LABORATORY

778/44, Gokul 1st Stage, 2nd Phase, 8th Cross, Triveni Road,
Yeshwanthpur, Bangalore - 560 054.

Tel.: 23378383, 23375326, E-mail : kthblr@gmail.com Website : www.karnatakatesthouse.com

Report No. : KTH/C.AGG/2836-4880b/2013-2014

Date: 22.03.2014

TEST REPORT ON AGGREGATE (Coarse Aggregate)

Name of the Customer* : The Assistant Executive Engineer,
Shettyhalli Sub Division,
BBMP, Bangalore.

Name of the Project* : Providing Cement Concrete roads near Anjeneya Temple Shettyhalli in ward
No.12.

Name of Contractor* : The Technical Manager(West) – 1, KRIDL, Bangalore.

Source of Sample : Supplied by the Customer.

Sample Received on : 19.03.2014.

Technical Reference : IS: 2386 Part I to VIII– 1963 (Reaffirmed-2002), IS : 383 – 1970.

Sieve Analysis of Coarse Aggregate - 40mm & down size

Sl. No.	Sieve size mm	% Passing	IS : 383-1970 Stipulations		Remarks
			Single Size	Graded Size	
1	63	100	100	100	Sample does not confirms to IS: Stipulation of 40mm size Aggregate
2	40	13.87	85 to 100	95 to 100	
3	20	-	0 to 20	30 to 70	
4	12.5	-	0 to 20	-	
5	10	-	0 to 5	10 to 35	
6	4.75	-	-	0 to 5	

Sl. No.	Test Conducted	Identification mm	Results	IS : 383 – 1970 Stipulations
1	Flakiness Index (%)	40	15.3	Not specified
2	Elongation Index (%)	40	17.1	Not specified
3	Impact Value (%)	40	23.4	Shall not be more than 45% for Concrete and 30% for Wearing surfaces, such as runways, roads and pavements.

* As furnished by the Customer

For KARNATAKA TEST HOUSE PVT. LTD.

ಸಹಾಯಕ ಕಾರ್ಯಾಚಾರ್ಯ ಅಭಿಯಂತರರು
ಶಿಬ್ಬಹಳ್ಳಿ ಉಪವಿಭಾಗ, ದಾಸರಹಳ್ಳಿ ಪಲಯ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಎಸ್.ಎಂ.ಈಸ್. ರೋಡ್‌ನಲ್ಲಿ, ಬೆಂಗಳೂರು



(Signature)
(SREENIVASA.C.)
TECHNICAL MANAGER

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Report No. : KTH/C.AGG/2836-48806/2013-2014

Date: 22.03.2014

TEST REPORT ON AGGREGATE (Coarse Aggregate)

Name of the Customer* : The Assistant Executive Engineer,
Shettyhalli Sub Division,
BBMP, Bangalore.

Name of the Project* : Providing Cement Concrete roads near Anjeneya Temple Shettyhalli in ward
No.12.

Name of Contractor* : The Technical Manager (West)- 1, KRIDL, Bangalore.

Source of Sample : Supplied by the Customer.

Sample Received on : 19.03.2014.

Technical Reference : IS : 2386 Part I to VIII- 1963 (Reaffirmed-2002), IS : 383 - 1970.

Sieve Analysis of Coarse Aggregate - 20mm

Sl. No.	Sieve size mm	% Passing	IS : 383-1970 Stipulations		Remarks
			Single Size	Graded Size	
1	40	100	100	100	Sample confirms to Single size of IS: Stipulation of 20mm size Aggregate.
2	20	87.16	85 to 100	95 to 100	
3	16	26.71	-	-	
4	10	16.35	0 to 20	25 to 55	
5	4.75	3.04	0 to 5	0 to 10	

Sl. No.	Test Conducted	Identification mm	Results %	IS : 383 - 1970 Stipulations
1	Flakiness Index (%)	20	13.2	Not specified
2	Elongation Index (%)	20	20.3	Not specified
3	Crushing Value (%)	20	24.1	Shall not be more than 45% for Concrete and 30% for Wearing surfaces, such as runways, roads and pavements.

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ಬೃಹದ್ ನಗರಾಪೇಟೆ ಮಹಾನಗರ ಪಾಲಿಕೆ
ಎಸ್.ಎಂ. ರಸ್ತೆ, ರವೀಂದ್ರನಗರ, ಬೆಂಗಳೂರು



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Report No. : KTH/C.AGG/2836-4882b/2013-2014

Date: 22.03.2014

TEST REPORT ON AGGREGATE

(Fine Aggregate)

Name of the Customer* : The Assistant Executive Engineer,
Shettyhalli Sub Division,
BBMP, Bangalore.

Name of the Project* : Providing Cement Concrete roads near Anjeneya Temple Shettyhalli in ward
No.12.

Name of Contractor* : The Technical Manager (West)- 1, KRIDL, Bangalore.

Source of Sample : Supplied by the Customer.

Sample Received on : 19.03.2014.

Technical Reference : IS : 2386 Part I to VIII- 1963 (Reaffirmed-2002), IS : 383 - 1970.

Sieve Analysis of Fine Aggregate (River Sand)

Sl. No.	Sieve size mm	% Passing	IS : 383 - 1970 Specification				Remarks
			% passing for Zone I	% passing for Zone II	% passing for Zone III	% Passing for Zone IV	
1	10	100.0	100	100	100	100	Falls in Zone -II as per table 4 of IS-383 - 1970.
2	4.75	98.6	90 - 100	90 - 100	90 - 100	95 - 100	
3	2.36	89.5	60 - 95	75 - 100	85 - 100	95 - 100	
4	1.18	78.7	30 - 70	55 - 90	75 - 100	90 - 100	
5	0.600	51.3	15 - 34	35 - 59	60 - 79	80 - 100	
6	0.300	14.8	5 - 20	8 - 30	12 - 40	15 to 50	
7	0.150	2.8	0 - 10	0 - 10	0 - 10	0 to 15	

Sl. No.	Test Conducted	Results	IS : 383 - 1970 Stipulations
1.	Materials finer than 75 microns (%) (Deleterious Material)	1.6	Shall not be more than 3.0 %
2.	Fineness Modulus	2.8	Min - 2.0 Max - 3.5

* As furnished by the Customer

For KARNATAKA TEST HOUSE PVT. LTD.

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ಎಸ್.ಎಂ ರಸ್ತೆ, ರವೀಂದ್ರನಗರ, ಬೆಂಗಳೂರು



(SREENIVASA.C)
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Report No. : KTH/CEMENT/2836-4881b/2013-2014

Date: 26.03.2014

PHYSICAL TEST REPORT ON CEMENT

Interim 3 & 7 days

Name of the Customer* : **The Assistant Executive Engineer,**
Shettyhalli Sub Division,
BBMP, Bangalore.

Name of the Project* : Providing Cement Concrete roads near Anjeneya Temple Shettyhalli in ward
No.12.

Name of Contractor* : The Technical Manager (West)- 1, KRIDL, Bangalore.

Source of Sample : Supplied by the Customer.

Type of Cement* : Ordinary Portland cement (OPC)

Brand of Cement* : Birla super 53 Grade.

Sample Received on : 19.03.2014.

Period of Test : 19.03.2014 to 26.03.2014.

Technical Reference : IS: 4031(Part I-VI) 1988 (Reaffirmed-2000) & IS: 12269-1987.

Sl. No.	Test Conducted	Results	IS : 12269-1987 Stipulation	Remarks
1	Normal consistency	27.0 %	Not specified	-
2	Initial setting time	184 minutes	Shall not be less than 30 minutes	P
3	Final setting time	263 minutes	Shall not be more than 600 minutes	P
4	Compressive strength (Average of three results) a. 72 $\pm$ 1h (3 days) b. 168 $\pm$ 2h (7 days) c. 672 $\pm$ 4h (28 days)	27.98 MPa 38.15 MPa T.T.C	Shall not be less than 27.0 MPa Shall not be less than 37.0 MPa Shall not be less than 53.0 MPa	P P -
5	Fineness (By Blaine's air permeability method)	360.22 m ² /kg	Shall not be less than 225 m ² /kg	P
6	Soundness (Le-chatlier's method)	1.02 mm	Shall not be more than 10 mm	P

P: Passes IS requirement

F: Fails IS requirement

T.T.C: Test To be Conducted.

*As furnished by the Customer

For KARNATAKA TEST HOUSE PVT. LTD.

AE 12



(SREENIVASA.C.)

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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಶಿಬಿರ ಬಳಿ, ಕಾಪರಗುಡಿ, ಬೆಂಗಳೂರು
ಬೃಹತ್ ಮಂಗಳೂರು ಜಿಲ್ಲಾ
ಎಸ್.ಎಂ. ರಸ್ತೆ, ರವೀಂದ್ರನಗರ, ಬೆಂಗಳೂರು

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Report No.: KTH/ST/2836-4883b/2013-2014

Date: 22.03.2014

TEST REPORT ON STEEL BARS

Name of the Customer* : The Assistant Executive Engineer,
Shettyhalli Sub Division,
BBMP Bangalore.

Name of the Project* : Providing Cement Concrete roads near Anjeneya Temple Shettyhalli in ward
No.12.

Name of Contractor* : The Technical Manager (West)- 1, KRIDL, Bangalore.

Source of Sample : Supplied by the Customer.

Sample Received on : 19.03.2014.

Nature of Sample* : Reinforcement steel -10mm & 12mm.

Technical Reference : Tensile IS: 1786 - 2008 & IS: 1608-1995 (Reaffirmed-2000)
Bend & Re-bend IS: 1786 - 2008 & IS: 1599 - 1985 (Reaffirmed-2000)

Grade of Steel* : Fe-500.

TENSILE TEST :

Dia (mm)	10	12	Limits as per IS : 1786-2008, Gr. Fe 500
Weight / unit length (kg/m)	0.590	0.875	10mm - 0.574 Min 12mm - 0.844 Min
Yield Stress (N/mm ²)	587.9	512.9	500 Min
Tensile Strength (N/mm ²)	851.2	701.5	10% More than actual 0.2% proof stress but not less than 545 N/mm ²
% Elongation (on 5.65 $\sqrt{A.G.L}$)	20.0	22.1	12.0 Min.

BEND TEST:

Sl. No.	Dia (mm)	Mandrel diameter	Observations
1.	10	4 dia	No cracks observed. Passes the test.
2.	12	4 dia	No cracks observed. Passes the test.

REBEND TEST:

Sl. No.	Dia (mm)	Mandrel diameter	Observations
1.	10	5 dia	No cracks observed. Passes the test.
2.	12	7 dia	No cracks observed. Passes the test.

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For KARNATAKA TEST HOUSE PVT. LTD.

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